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Remarks

Applicant has herein amended claims 1 and 22-35, and has canceled claims 4-14. Twenty four (24) claims remain pending in the application: claims 1-3 and 15-35, of which claims 1 and 22 are independent. Applicant respectfully requests reconsideration of the pending claims, in view of the amendments above and comments below.

Double Patenting

On page 2 of the Office Action mailed December 3, 2003, claims 1-8, 10-13, 15-25, 27-30, 34 and 35 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 7-11, 12-25, 27-30, 32 and 33 of copending Application No. 09/993086. The Office action states:

"a method of preventing diabetes" as opposed to "a method of treating patients with eating disorders" and "inhibit" as opposed to "modulate" are considered functionally equivalent.

Although the applicant disagrees with the Examiner's conclusion that the claims "are not patentably distinct from each other," applicant has enclosed herewith a terminal disclaimer to address this rejection. Thus, without necessarily agreeing with such rejection but in order to speed the prosecution of the present application to issuance, applicant has filed herewith a terminal disclaimer showing the cited application is commonly owned with the present application, thereby overcoming the subject rejection.

Claim Rejections - 35 USC § 103

On page 3 of the Office action, claims 1-3, 15-18, 20 and 22 were rejected under 35 U.S.C. 103(a) as unpatentable (obvious) over Rise US-5782798 in view of Fischell US-6006124. The Office Action states that:

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Rise....delivers electrical stimulation and therapeutic dosages of one or more drugs to the lateral hypothalamus; paraventricular nucleus or the ventral medial hypothalamus.... *Office action, paragraph 3.*

Each of these claims, or a claim from which they depend, has been amended or canceled, as described below.

To overcome this rejection, applicant has amended independent claims 1 and 22, and believes that Rise, nor any prior art known to the applicant, alone or in combination, discloses the invention as claimed in amended independent claims 1 and 22. For instance, and as stated by the Examiner, Rise teaches only electrical stimulation or drug infusion into the lateral hypothalamus, paraventricular hypothalamus, and ventral medial hypothalamus (see Table I in column 3, Table II in column 4 and Table IV in column 5). However, independent claims 1 and 22, as amended, address the portions of the brainstem known as the dorsal motor nucleus of the vagus nerve and the nucleus of the solitary tract. See, *inter alia*, original claims 1 and 22 and paragraph [0122] of the present application:

[0122] According to certain embodiments of the invention, the electrical and/or drug stimulation increases excitement of one or more of those areas of the brain that exhibit chronic decreased activity in diabetic patients relative to control subjects, thereby treating or preventing diabetes and the symptoms and pathological consequences thereof....For example, this excitatory stimulation may be applied to, among other places, one or more of...the dorsal motor nucleus of the vagus nerve 108, and the nucleus of the solitary tract 110.

Rise does not mention stimulation of the nucleus of the solitary tract, the dorsal motor nucleus of the vagus nerve, or indeed, any area of the brainstem. Thus, applicant has amended independent claims 1 and 22 to retain only the nucleus of the solitary tract and the dorsal motor nucleus of the vagus nerve, while the other areas claimed in original independent claims 1 and 22 have been removed by the present amendment. As a result of these amendments, claims 4-14 have been canceled.

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As Rise and the other known prior art do not mention stimulation of the nucleus of the solitary tract or the dorsal motor nucleus of the vagus nerve or *any* area of the brainstem, it is believed that independent claims 1 and 22 have been placed in condition for allowance. Acknowledgment of the same is earnestly solicited.

On page 3 of the Office action mailed December 3, 2003, claims 2, 3, 15-18 and 20, which depend from claim 1, were also rejected as obvious over Rise in view of Fischell. As each of these claims depends directly from independent claim 1, this rejection is overcome by way of the present amendment for the same reasons given above in support of currently amended claim 1.

On page 4 of the Office action, claims 4 and 5 were rejected under 35 U.S.C. 103(a) as unpatentable (obvious) over Rise in view of Fischell as applied to claim 1 above and further in view of Frankish et al (Neuropeptide Y, the Hypothalamus, and Diabetes: Insights into the Central Control of Metabolism - article). Without necessarily agreeing with the rejection, but in order to speed the prosecution of the present application to issuance, applicant has canceled claims 4 and 5, as mentioned earlier, making the rejection thereto moot. Applicant reserves the right to pursue the canceled claims in a continuing application(s).

On page 5 of the Office action, claims 6, 7 and 9-14 were rejected as obvious over Rise in view of Fischell as applied to claim 1, and further in view of Mondai et al (Orexins (Hypocretins): Novel Hypothalamic Peptides with Divergent Functions - article). Without necessarily agreeing with the rejection, but in order to speed the prosecution of the present application to issuance, applicant has canceled claims 6, 7 and 9-14, as mentioned earlier, making the rejection thereto moot. Applicant reserves the right to pursue the canceled claims in a continuing application(s).

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On page 6 of the Office action, claim 8 was rejected as obvious over Rise in view of Fischell as applied to claim 1, and further in view of Bernfield et al US-6284729. Without necessarily agreeing with the rejection, but in order to speed the prosecution of the present application to issuance, applicant has canceled claim 8, as mentioned earlier, making the rejection thereto moot. Applicant reserves the right to pursue the canceled claim in a continuing application(s).

Also on page 6 of the Office action, claims 19 and 23-34 were rejected as obvious over Rise in view of Fischell as applied to claim 1, and further in view of Zabara US-5540734. For claim 19, which depends directly from independent claim 1, this rejection is overcome by way of the present amendment for the same reasons given above in support of currently amended claim 1. For claims 23-34, which, after entry of this amendment, depend directly or indirectly from independent claim 22, this rejection is overcome by way of the present amendment for the same reasons given above in support of currently amended claim 22.

On page 7 of the Office action, claim 21 was rejected as obvious over Rise in view of Fischell as applied to claim 1 and further in view of Schulman et al US-5193540. As this claim depends directly from independent claim 1, this rejection is overcome by way of the present amendment for the same reasons given above in support of currently amended claim 1.

Also on page 7 of the Office action, claim 35 was rejected as obvious over Rise in view of Fischell and Zabara as applied to claim 23 and further in view of Schulman et al. As this claim depends directly from independent claim 22, this rejection is overcome by way of the present amendment for the same reasons given above in support of currently amended claim 22.

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Conclusion

After entry of this amendment, all pending claims depend directly or indirectly from amended independent claim 1 or 22. As such, applicants respectfully request consideration of amended independent claims 1 and 22, and their dependent claims, in light of these remarks and the related claim amendments. Entry of the changes to the claims and indication of allowance relative to all of pending claims (claims 1-3 and 15-35) is earnestly solicited.

The Examiner is invited to telephone the undersigned, Laura H. Bishop, at his convenience should any issues remain after consideration and entry of this response, in order to permit early resolution of the same.

Respectfully Submitted,

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